Spring 2007

LOUISIANA Conservationist

Your Window to the Outdoors

$2.50

Wildflower Fever

Inside:

Outdoor Photography

Wildlife Mentors

Dedicated to the conservation and restoration of Louisiana's natural resources.
Published by the Louisiana Department of Wildlife and Fisheries.

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Comments

Bryant O. Hammett, Jr., Secretary

Warm weather motivates many Louisianians and visitors to our state to get out on the water. Our numerous inland waterways and easy access to coastal and gulf waters make fishing and boating popular pastimes.

Boating safety is always a concern for Louisiana Department of Wildlife and Fisheries (LDWF) Enforcement Division agents as they patrol state waterways. But with more boats on the water in spring and summer months, that concern is heightened. Boaters are stopped and checked not only for compliance with fishing regulations, but also for safety inspections, suspicion of DWI and any situations involving reckless operation.

Reminding boaters to wear appropriate personal flotation devices (PFDs) reinforces the fact that simply wearing a PFD can save a life. Agents are aware that more than 80 percent of all boating fatalities are caused by drowning, and many of those could be prevented by wearing the life vests we too frequently leave in the dry well.

However, the trends shown in U.S. Coast Guard boating accident data indicate that the safety message stressed by this agency and all public safety officials is getting through. Louisiana's boating accident total of 154 in 2001 had dropped to 111 in 2006, and the numbers of lives lost in those accidents dropped from 35 in 2001 to 24 in 2006.

The safe boating courses taught by LDWF, the U.S. Coast Guard Auxiliary, the U.S. Power Squadron and other sources are making a difference by saving lives. Courses are scheduled year-round throughout the state. From the LDWF Web site home page at *www.wlf.louisiana.gov*, click on "Boating" and then "Courses." You'll find regional links to the various state boating courses offered near you. There is even an online class option.

If you've never taken a boating safety course, but you've been a boat owner for years and are above the age requirement, it's well worth the effort. Boating education is mandatory for anyone born after Jan. 1, 1988, when operating a motor-powered boat with an engine exceeding 10 horsepower. Completion of a safe boating course is also required for anyone under the age of 16 who operates a personal watercraft (PWC). At 13 years of age those operating PWCs can obtain boating safety certification and become approved PWC operators.

For those in your care while on the water—whether they be adults or youngsters—a safe boating course can provide peace of mind and key safety information. The important message this time of year is simply *"Boat Safe, Boat Smart."*

Mark your calendars now for these important dates ahead. The week of June 2-10 is National Fishing and Boating Week and the weekend of June 9 and 10 will be Louisiana's NO LICENSE REQUIRED Fishing Weekend. It's the one weekend a year when LDWF invites everyone to go recreational fishing. We want to attract more participants to the sport, and hopefully those trying it for the first time—or the first time in a long time—will become motivated to join the thousands of license holders who support what LDWF does to manage the state's fisheries.

I encourage those of you who fish regularly to set aside time to take someone fishing. Whether it's bank fishing, pier fishing or fishing from a boat, enjoy what Louisiana has to offer in a bayou, lake, river or saltwater spot near you. And if you're going to be on the water, remember to take a safe boating course before you go.

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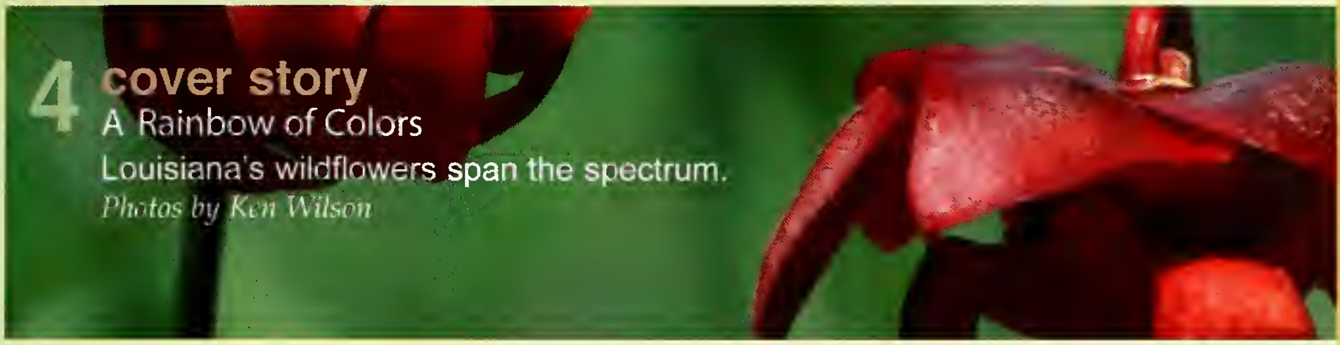

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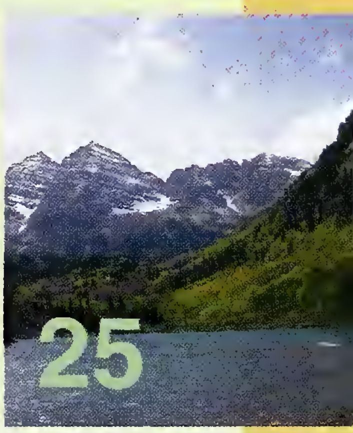

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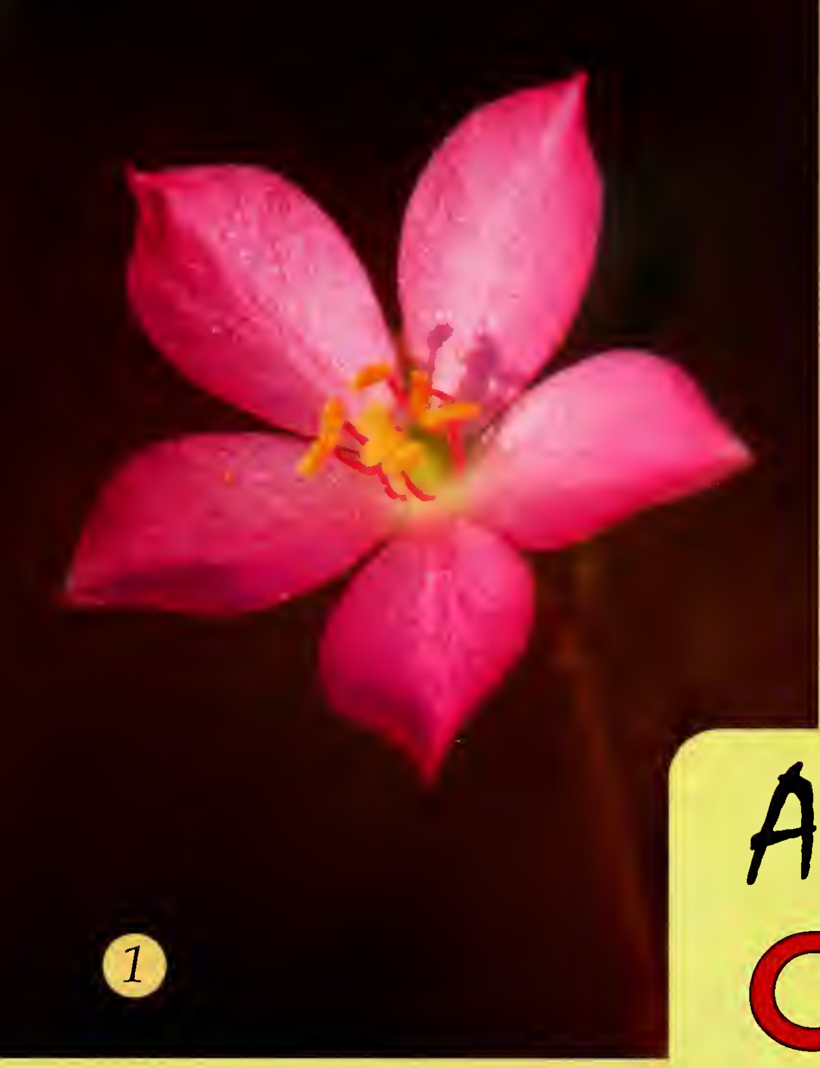

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A Rainbow of COLORS

Louisiana Wildflowers Span the Spectrum

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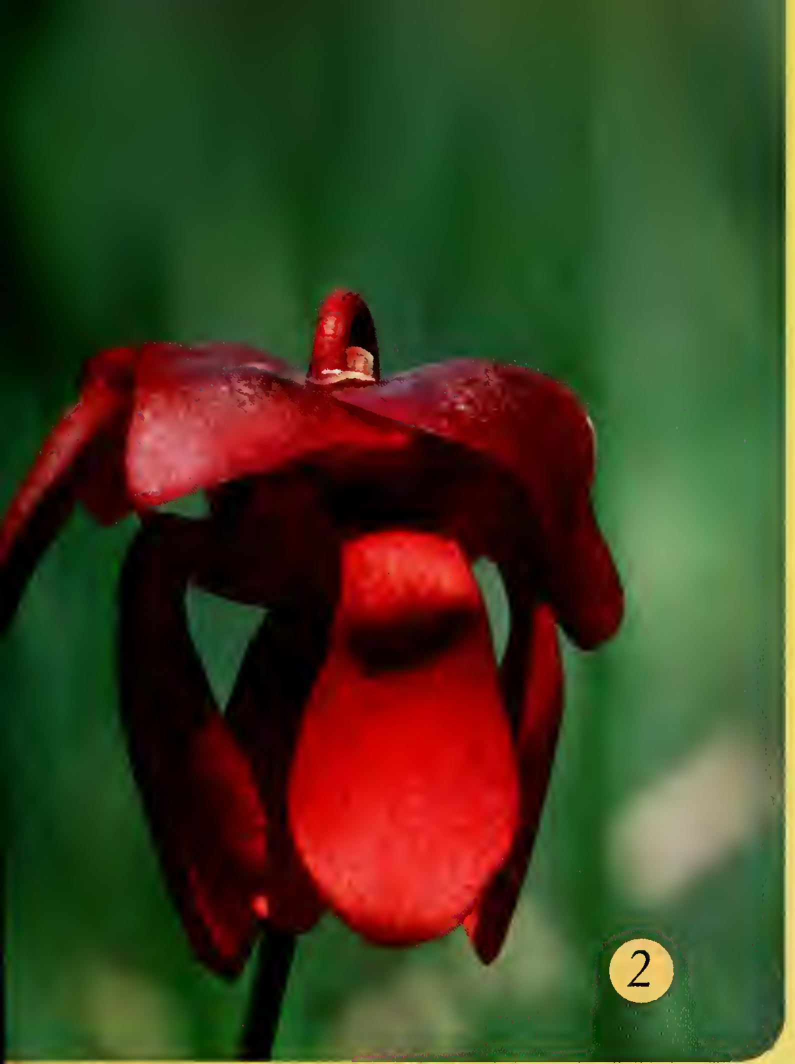

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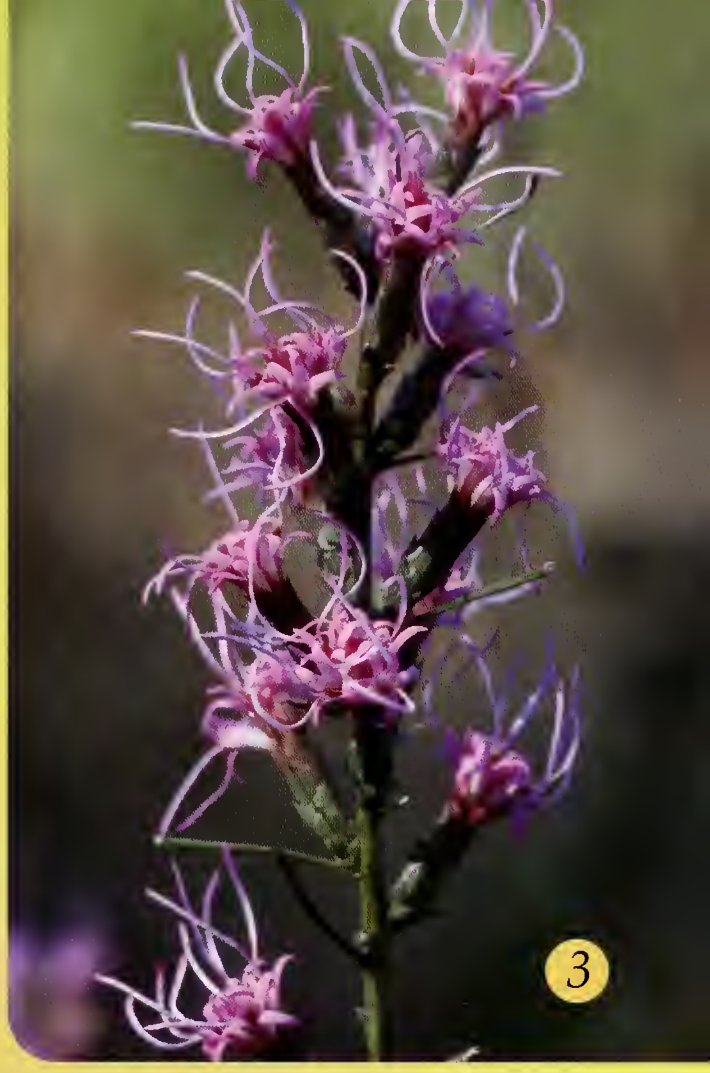

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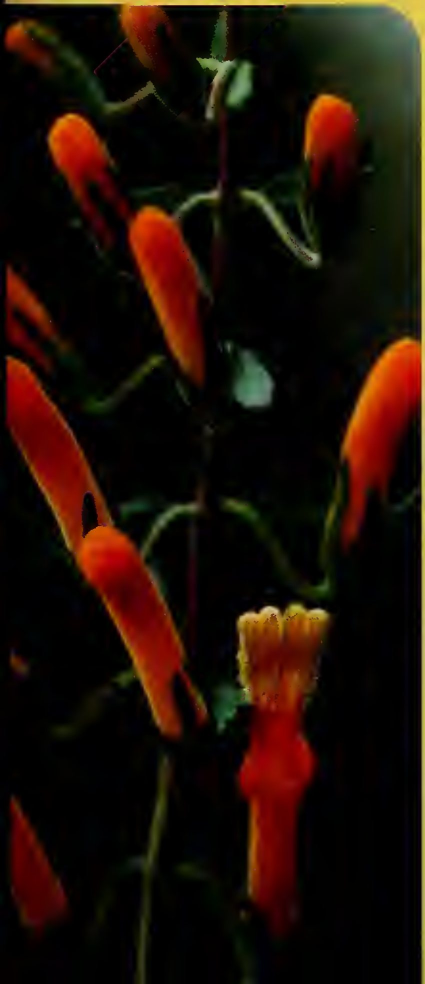
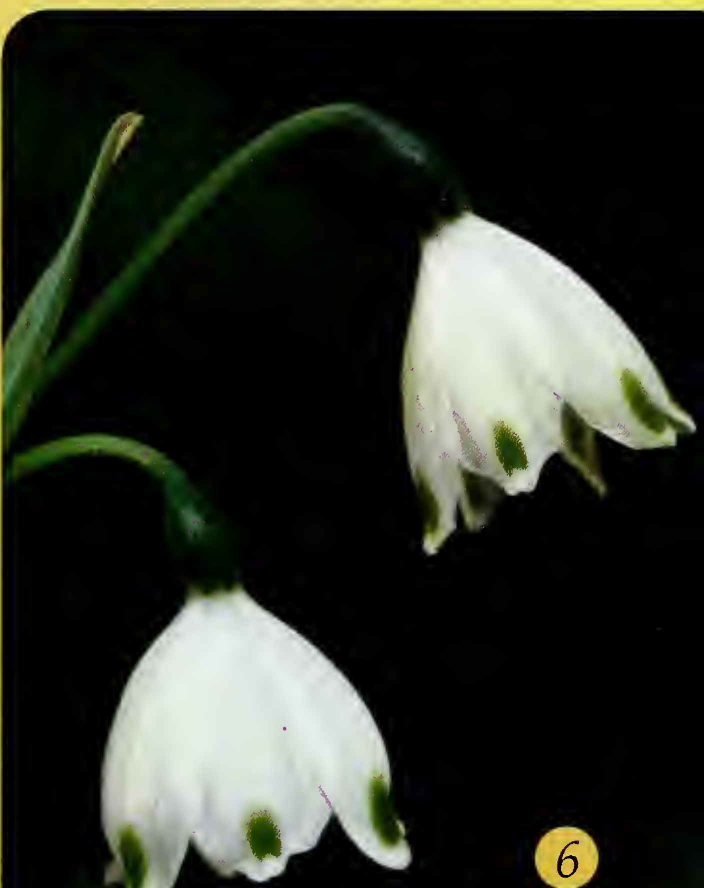


Photos by

Ken WILSON

1. The perfect, pink smallflower, fameflower or sunbright (*Talinum parviflorum*) blooms late in the day.
2. Restricted to bogs, the parrot pitcherplant (*Sarracenia psittacina)* is rare in Louisiana.
3. The scaly blazing star (*Liatris squarrosa*) blooms from July to November.
4. The Rio Grande copperlily (***Habranthus tubispathus***, syn = ***H. texanus***) is slender stemmed and blooms in April mostly in western Louisiana.
5. Flame flower or orange blackherb (*Macranthera flammea)* has been recorded in St. Tammany and Washington parishes.
6. With nodding petals, the cultivated snowflake (*Leuccojum aestivum)* persists throughout the state.



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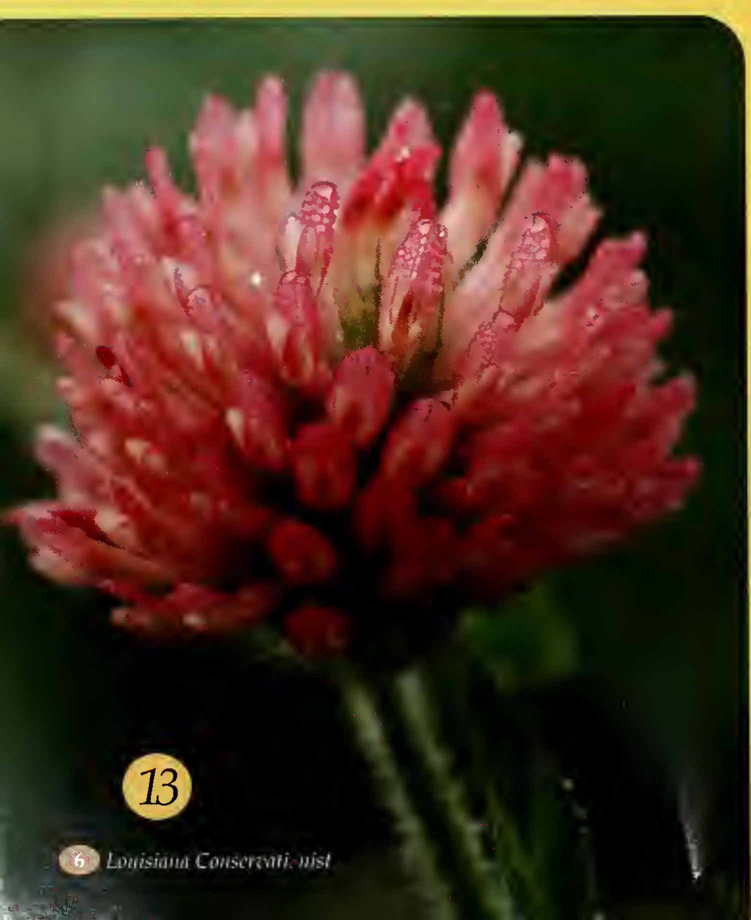

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7. The hairy groomwell (*Onosmodium molle*) is restricted to sandy soils off the coast and calcareous prairie sites inland.

8. Downy lobelia (*Lobelia puberula*) has filaments shorter than 7 mm and is found throughout the state from moist to dry habitats.

9. Found in all 64 parishes, the false dandelion (*Pyrrhopappus caroliniana)* can grow to 30 inches tall.

10. The woodland poppymallow (*Callirhoe papaver*) is a common and widespread species in pine and prairie regions of the state.

11. One of more than 20 species in the state, the red milkweed (*Asclepias rubra*) blooms from May to September.

12. Often abundant in remnant and restored Cajun prairies, the prairie parsley (*Polytaenia nuttallii*) has been reported in 12 Louisiana parishes.

13. An introduced species, Persian clover (*Trifolium resupinatum*) is a cool season plant that disappears during warm summer months.

14. Shooting Star (*Dodecatheon meadia*) is a rare species in well drained soils with reports only from Bossier, Caddo and Natchitoches parishes.

15. A native perennial, the slender rosepink (*Sabatia campanulata*) is found in bogs and savannahs.

16. The Carolina lily (*Lilium carolinianum*) is uncommon to rare in well-drained forests throughout Louisiana.

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FLY-FISHING IN LOUISIANA

Story by
Pete
COOPER JR.

Any fish that will strike an artificial lure will strike a fly—even tripletails! This 11.3-pounder caught by Cooper in 1997 is still number one in its division.

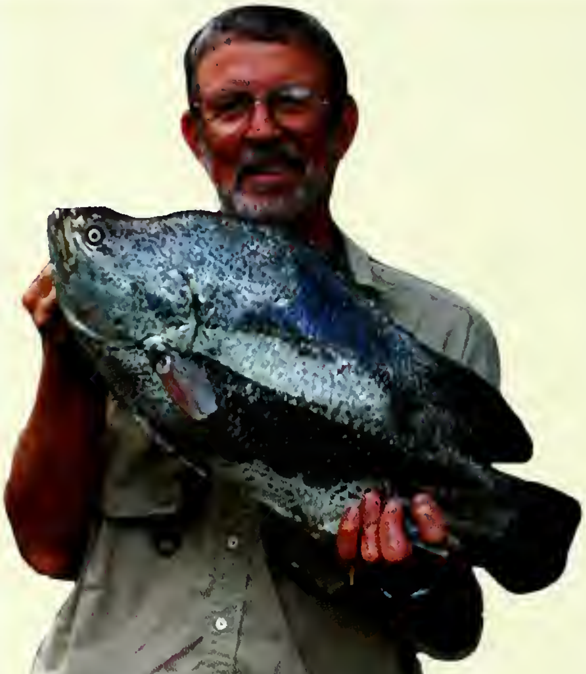


Photo courtesy of Pete Cooper Jr.

THE "RECORD BOOK" FOR LOUISIANA'S FLY-CAUGHT FISH CONTAINS SOME ENTRIES THAT WOULD BE NOTABLE ANYWHERE.

HERE'S HOW IT EVOLVED...

FOR THE RECORD

During the past two decades the sport of fly-fishing in Louisiana has markedly increased in popularity, especially when practiced in saltwater. The entries in its division within the state's fishing records plainly illustrate that Louisiana has some outstanding opportunities for those who are inclined to practice the exercise. It therefore serves as an enticement for non-resident fly-fishermen as well as a useful tool for fisheries biologists. Those are two of the primary reasons why I became involved in establishing the ground rules for the division. Additionally, the rules ensure that everyone is playing on the same level. But I am getting far ahead of myself. So here's how it all came about—to the best of my recollection, anyway!

Once upon a time, long long ago—well, maybe not that long ago, but back when redfish were second-class citizens and Florida-strain largemouths lived in Florida—the state's fishing records were comprised of three divisions: freshwater, saltwater and bass caught on a fly rod. Notably, entrants into the latter did not have to be caught while the angler was actually fly-fishing, only if he was using a fly rod. (Probably soaking his shiners!)

Around the mid-1980s Mr. Joe Macaluso, then a sports writer for the *State-Times* (now *The Advocate*) in Baton Rouge and a member of the Louisiana Outdoor Writers Association (LOWA) inherited the duties of record-keeper. Shortly thereafter, he added a category for redfish caught on a fly. I fondly recall his response to my first entry, which included the fly that had done the job...something like how hard it was for him to believe that even a dumb ol' redfish would strike a fly that ugly! But he accepted it, and it was the first of my three top fly-caught reds.

The position of curator of the state's fishing records passed on to the late Mr. Ed Vice shortly after that. Ed was also a member of LOWA and still at the time when fly-fishing, especially in saltwater, was looked upon hereabouts with skepticism at best. Nevertheless, unlike so many others he saw the potential for growing interest in the sport. One of the ways he thought to generate that interest was to establish a separate division—an all-inclusive division—for fly-fishing in the state's fishing records. Need I say that back then, that was pretty radical!

Anyway, the trouble was that Ed knew almost as much about fly-fishing as he did about hunting Siberian tigers. So on a fishing trip that we made together out at the Chandeleur Islands in April 1993 (where in the teeth of a young gale I proudly managed three reds and a nice speck on fly), he asked if I would help set it up by drafting a list of appropriate rules and regulations—again, to keep everyone playing on the same field.

Much of the finished product was gleaned from International Game Fish

Photo by Pete Cooper Jr.

Some big cobia have been caught on flies in Louisiana waters. This one—taken by Capt. Bubby Rodriguez—weighed 46 pounds and held the top spot in the record book for almost two years.

Susan Gros with her 22-pound red snapper caught on a fly in May 2004. This fish is both a Louisiana State Record and an IGFA World Record.

Photo courtesy of Susan Gros

Association (IGFA) regulations with a few of my own thoughts added on. It was intended to be entirely fair, it proved to be so, and a few subsequent additions by noted angler and fellow LOWA member Ms. Susan Gros made it even more so.

Due to an illness that was to take him long before his time, Ed passed the responsibilities of curator to Mr. Bill Ford, who has since done an exemplary job with them. During Bill's tenure many categories within the division have been filled and filled again, and the list has included fish that have received LOWA's prestigious "Fish of the Year Award." A "Fly Fish of the Year Award" was not long in coming—another means of generating interest in the sport. There even appears to be some competition among the state's fly-fishermen to see who can get the most fish "into the book."

To check out some of the great deeds that have been accomplished by fly-fishermen in Louisiana waters, visit *laoutdoorwriters.com*, and click on "Fish Records" in the left-hand column. The next page leads to all the divisions in the records; click on the one you are interested in, and a list of the various species will appear. Prepare to get blown away by some of the entrants therein, especially in "Fly-Fishing—Saltwater!"

If I may humbly relate one that I remain very prideful of, it's my 36-pound king mackerel. Then you might take note of Richard Evans' 74-pound yellowfin tuna! Mercy—sure glad it was him and not me! And incidentally, to be within the rules the leader must contain a section that cannot exceed 20-pound test!

Inshore, Captain Jeff Poe's 9.31-pound speck is one that should raise some eyebrows, but perhaps no more so than Dr. Jim LaNasa's 7.21-pound flounder! Some big fish of both small and large types have been caught on flies off our coast.

And that finely illustrates to the nonbelievers of yesteryear as well as to the

Among Louisiana's saltwater species, bull redfish are one of the most readily available big-fish opportunities for fly-fishermen. This one—at 36 pounds—was tops in the state for five years.

Photo courtesy of Pete Cooper Jr.

Photo by Bob Borgwat

The late Ed Vice, fishing for largemouth bass at the Lakes of Gum Cove.

doubters in other states that it can be done here in Louisiana. Indeed, in some of the categories our state's top fly-caught fish is second to none. And anyone anywhere can Google it up on the internet to see for himself, thanks to the fly-fishing division of the state's fishing records. Every one of us who fly-fishes or who benefits from it should give the memory of Ed Vice a bit of thanks for his vision.

And I must avow that I was and still am awfully proud to have been a part in bringing it to fulfillment.

Recognized as a pioneer of saltwater fly-fishing in Louisiana, Pete Cooper Jr. is the author of Fly Fishing the Louisiana Coast. He is a member of the Louisiana Sportsman's Hall of Fame and is a regular contributor to Louisiana Conservationist.

THINK YOU'VE CAUGHT ONE FOR THE "TOP 10" IN THE FLY-FISHING DIVISION OR WANT TO BE PREAPRED, JUST IN CASE YOU DO?

Visit the LOWA Web site at *www.laoutdoorwriters.com*. Check out current record holders and download application forms. Links to forms are located just below the listing of the various divisions on the "Fish Records" page. Click on the appropriate link and print a few copies. While you're at it, you may as well familiarize yourself with the rules *before* you catch a potential record-holder. That way, you'll know just who to call when you do!

SPRING

Birding Events with LDWF

NEOTROPICAL SONGBIRD TOUR

Birding enthusiasts can experience the wonder and variety of migrating songbirds at the annual Neotropical Songbird Tour, held at Sherburne Wildlife Management Area (WMA) on Saturday, May 12. No registration is required, but participants should arrive by 7:30 a.m. at the intersection of Exit 127 on Interstate 10, located halfway between Lafayette and Baton Rouge and La. Hwy 975. Look for a gravel pull-off just after turning onto La. 975.

The Neotropical Songbird Tour will take participants on one of the leading breeding bird survey routes in North America. Participants will be introduced to bird identification through their songs and chirp notes. These vocalizations, orginating from the dense understory or the tall canopy of deciduous bottomland hardwood forest, are usually the first clues to the area's wealth of bird species. Sherburne WMA offers one of the highest densities of nesting neotropical songbirds in North America.

Tour participants will be guided to two sites where facilitators will be available to assist them in bird identification. Participants can expect to see a number of species of kites, herons, egrets, woodpeckers, thrushes, warblers, and more. At each site it may be possible to hear as many as 15 species of birds. Some birds are easily seen whereas other are elusive, so binoculars may be useful. The Louisiana Department of Wildlife and Fisheries (LDWF) will also demonstrate mist-netting techniques used in monitoring programs on the WMA complex. The bird tour will conclude around 11 a.m.

For a downloadable Atchafalaya Basin bird checklist from the U.S. Fish and Wildlife Service, please visit *http://www.fws.gov/southeast/pubs/atchafalaya_birdlist.pdf.*

The Neotropical Songbird Tour is sponsored by LDWF, the U.S. Army Corps of Engineers Basin Ranger District, U.S. Fish and Wildlife Service and the Louisiana Department of Natural Resources Atchafalaya Basin Program.

For more information, contact Eric Baka with LDWF at 225/765-2359 (*ebaka@wlf.louisiana.gov*) or Jay Huner at 318/793-5529 (*piku@classicnet.net*).

WOOD STORK FESTIVAL AT SOUTH FARM

LDWF personnel will also participate in the Wood Stork Festival on the South Farm area of Sherburne WMA. The event is typically held on the third Saturday in July, but as of this printing, a firm date was yet to be established.

For more information on dates and attending this event, contact Eric Baka with LDWF at 225/765-2359 or visit the LDWF Web site at *www.wlf.louisiana.gov.*

State Wildlife Grants & LA's Wildlife Action Plan

The Louisiana Department of Wildlife and Fisheries (LDWF) is set to receive $903,000 in 2007 through the State Wildlife Grants (SWG) Program.

The funding was approved when President Bush signed into law a continuing resolution in February that will fund the SWG program at fiscal year 2006 levels for the rest of 2007. The federal funds come to LDWF through the U.S. Fish and Wildlife Service (USFWS), and Louisiana has received a little over $5.5 million in funding since SWG became available in 2000.

SWG funds are used to support research and programs that target wildlife species threatened by habitat changes. LDWF intends to emphasize species that are not commercially or recreationally hunted, trapped or fished. The use of funds is directed by Louisiana's Wildlife Action Plan (WAP), approved by USFWS in 2006.

In fiscal year 2007, the national SWG funding total will reach $67.5 million. The seven-year national total for the SWG funding exceeds $470 million.

In order to receive these funds, Congress mandated that each state devise a WAP by Oct. 1, 2005. Louisiana's WAP developed a blueprint for guiding LDWF in the development of management actions for Louisiana's fish and wildlife species with emphasis on species of conservation concern and the associated habitats they depend upon. LDWF published Louisiana's approved WAP in February of 2006 and a complete copy can be found at *www.wlf.louisiana.gov/experience/wildlifeactionplan/wildlifeplandetails.*

The projects listed below are just a few examples of the various WAP projects funded through the SWG program. For additional information on these or any other WAP projects, contact Andy Ardoin at 225/765-0239 or *aardoin@wlf.louisiana.gov.*

Projects:

Assessing Abundance & Condition of Henslow's Sparrow in Managed Savannas across Louisiana

This three-year project will evaluate habitat quality for the Henslow's sparrow with a total budget of $98,165. The Henslow's sparrow is a grassland sparrow that has declined in abundance concurrent with reductions in longleaf pine forests. The study is determining how habitat quality and management (especially the reintroduction of fire into historically fire-regulated pine habitats) affects Henslow's sparrows and intends to derive management recommendations that will benefit Henslow's sparrows and other species that depend on these habitats.

Locating Sandhill Woodlands and Saline Prairie Habitat

This one-year project has recently been completed with a total budget of $7,000. The study's objective was to document locations of these two globally threatened habitat types in Louisiana. These habitats support 18 species of conservation concern including the Louisiana pine snake and the western glass lizard. The LDWF Natural Heritage Program has been utilizing existing mapping data, GIS technology and field surveys to locate the surviving habitat localities. The Natural Heritage Program is using the results of this project to develop and implement strategies to protect and conserve these habitats, and the species they support.

Fisheries Inventory of Louisiana's Major Rivers

This two-year project is nearing completion and is part of baseline data gathering for management of Louisiana's inland fisheries with a total budget of $150,000. This information will help determine the health of the river systems, define routes used by invasive species to expand their range and establish the distribution of rare and unique species. LDWF is inventorying the fish assemblages in the Mississippi, Atchafalaya, Red, Black, Sabine, Ouachita, Mermentau and Calcasieu River basins. Sampling methods within rivers includes electrofishing and nets of various designs. Water quality parameters measured include dissolved oxygen, turbidity, pH and temperature at the surface and at the bottom.

LSU's Feathered Library

Part 2: The Collection as a Resource

Story by
James M. BISHOP, Ph. D.

In the last issue, we introduced the world-renowned bird library at the Louisiana State University Museum of Natural Science (LSUMNS). This library is full of not books, but birds...birds with stories to tell. In the collection's 70-year history, this feathered library has evolved from a six-bird exhibit to a vast and well-respected resource that contains more than 100,000 specimens and thousands of different species of birds from all over the world.

One might ask the obvious question, "Why is the accumulation of so many bird specimens necessary?" The reality is that even though the number of specimens in the LSU museum exceeds 170,000, this number represents a minute impact on bird populations. To put this number in perspective, consider these statistics: It has been estimated that house cats in the U.S. kill 100 million birds annually. U.S. hunters bagged some 13.3 million ducks in 2003 and harvested over 40 million mourning doves in 1989. Large as these numbers are, they are a fraction of the more than one billion birds killed annually in the U.S. as a result of collisions with automobiles, power lines, radio towers, windows and buildings. Birds are a renewable resource, and as long as good quality habitat is abundant, annual mortality does not place the population at risk. The problem is that good quality habitats are disappearing due to urban sprawl, harmful agricultural practices and intensive timber management.

Bird specimens in all the world's museums do not exceed 8.5 million. Although this seems like a large number, keep in mind that this total represents more than 200 years of collecting and that nearly every country in the world has at least one natural history collection. One reason that bird specimens do not number far more is that preparing a bird skin requires both skill and time. With such extensive data recorded for each specimen, writing out the specimen's label also requires considerable time, and good penmanship is essential. Combinations of heat, humidity, freezing temperatures, rain or bothersome flies, mosquitoes, leeches and other biting pests often characterize field conditions where specimens must be prepared. If the specimen is bloody or soiled, then the skin has to be washed and dried prior to stuffing.

SPECIMEN PREPARATION

My own personal experience with specimen preparation started back in 1984 in Kuwait, when I obtained some seagulls that had drowned after taking the bait from a fisherman's trotline. I had almost no previous skinning experience, but I knew the basic procedure and used a museum manual as a guide. Even with the luxury of skinning the birds in air-conditioned comfort on my dining room table, each bird required about four hours of concentrated work, and the results were visually not very satisfactory, as the specimens looked something like seagulls with goose-length necks.

LSUMNS personnel were delighted to obtain the material because several of the gulls were new species for the collection, but I received no fewer than three different critiques of specimen preparation. On a subsequent visit to the museum, Steve Cardiff, Collections Manager for Birds and Mammals, and Donna Dittmann, Collections Manager for Genetic Resources, provided me with some expert instructions for preparing study skins. More skilled instructors would have been difficult to find as their bird skins, in addition to being data rich, are considered to be among the finest by anyone.

On one occasion, I delivered some frozen specimens to the museum, and among them was a terek sandpiper. This bird had been found on the beach near Kuwait Towers, and when given to me, it had already been poorly wrapped and frozen for several years. I considered it good for a skeleton only and did nothing more to protect it from freeze drying. As it turned out, it was the museum's second specimen of this Old World species, and in spite of its being stored in a freezer for about six years, Donna worked her magic and produced a very respectable study skin. Subsequently, she eclipsed this feat by successfully preparing a surf scoter (duck), with skin like cardboard, as it had been in a California freezer for 27 years!

Another problem with specimen preparation is that not all birds have relatively tough skin. A couple of years ago, I attempted to prepare a hoopoe, a lovely zebra-striped bird with a crest that can be displayed at will. The hoopoe's skin is barely stronger than wet tissue paper, and by the time I had finished, more cotton stuffing was showing than feathers. Upon delivering this specimen to the museum, Donna exclaimed, "That's not bad," in a very complimentary and convincing tone of voice. I knew better, but encouragement is always the best medicine for a failed attempt. Moreover, as Dr. J. V. Remsen, the current Curator of Birds says, a poor study skin with good data is far more valuable than a beautiful skin with poor data. As we discussed in Part 1, plenty of nicely prepared skins with insufficient data already abound in the world's museums.

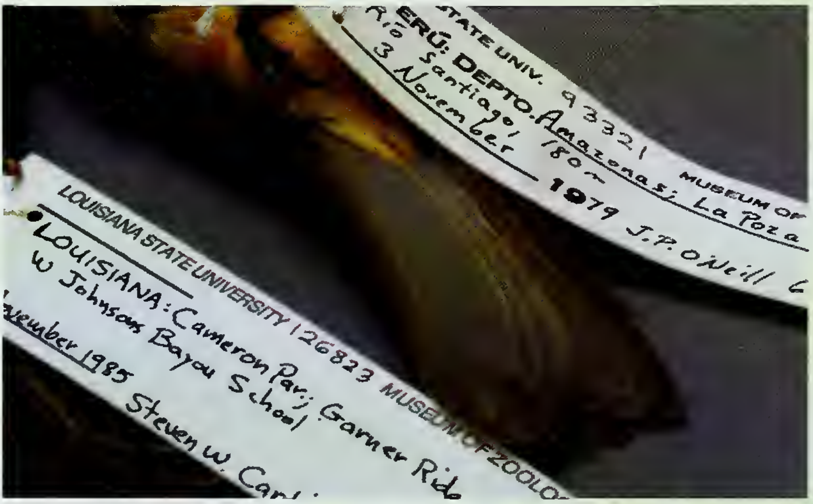
PART 2 OF A 2-PART SERIES

Look for Part 1 in the Winter 2007 issue.

SPECIES AND VARIETY

The question remains why so many bird specimens are necessary when the world's birds number about 10,000 species. The answer is that birds are individuals, and they vary throughout the year (breeding vs. winter plumage), throughout their geo-

Preparing bird specimens requires both skill and time. Extensive data is recorded for each specimen, and the act of writing out the label alone takes considerable time, and excellent penmanship.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LOUISIANA STATE UNIVERSITY 126823 MUSEUM OF ZOOLO
LOUISIANA: Cameron Par.; Garner Rid
W Johnsons Bayou School
vember 1985 Steven W. Car

Photo by Joel Courtney

graphic range in size and color, and as they age (juvenile vs. adult plumage). For example, many seagulls exhibit a different spring and fall plumage each year for three, four or, in some cases, five years to attain adult plumage. Therefore, a single specimen of a particular species would do little to fill in the bird's life story.

Even in the case of the Canada goose, whose image is perhaps the best known of all geese in the Western Hemisphere, the taxonomic status has changed. Within the past year or so, "the" Canada goose has been recognized as not one, but two species (and with additional analysis, perhaps more, as studies are continuing). Among the specimens in the LSU collection from Louisiana are representatives of both species. Had the museum not already had these specimens to re-evaluate their status, ascertaining the presence of the two species within Louisiana's borders may have been left to speculation.

Reasons to accumulate actual specimens are many. The earth is a dynamic place where change is the constant. Periodically, for reasons not entirely clear, some birds expand their range. This may happen at regular intervals during peak population years, or it may be an irregular event that occurs once in 20 to a 100 years and may reflect changes in the earth's magnetic field. Such events are little understood. Specimens allow scientists to re-examine old material in the light of new facts or theories.

With global warming resulting in rather unpredictable weather patterns, birds also serve as indicators of meteorological events. Hurricanes often force marine species inland. One unusual locality record is a specimen of a masked booby, an offshore species that became trapped in a barn in Jackson, East Feliciana Parish, during Hurricane Carla in 1961. Migrating birds follow a pattern, and certain species are noted as early migrants or late migrants. Their arrival or departure dates in Louisiana when headed north or south provide information as normal or otherwise with respect to that season's ranking. Actual specimens are not generally necessary to document arrival or departure dates of migrating species, but over the years the number of specimens from certain species accumulate, and dates from either extreme bracket their arrival and departure. In this way, specimens provide direct evidence of past events and are available for future comparisons as needed.

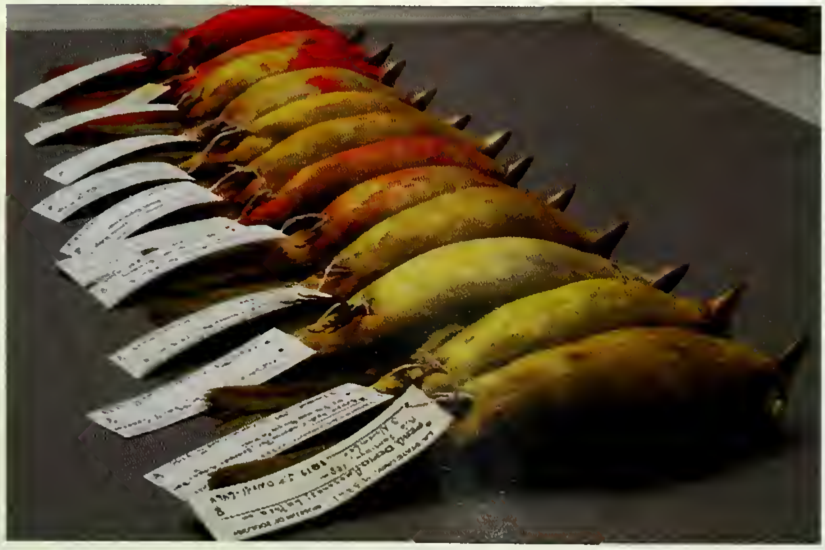


Photo by Joel Courtney

This row of summer tanagers (*Piranga rubra*) exhibits just a narrow range of color variations dependent on factors such as sex and age. From background to foreground:

1. **Typical adult male**
2. **Adult male (dull variant)**
3. **One-year-old typical male**
4. **One-year-old male (dull variant)**
5. **First fall male (dull variant male—with female-like plumage)**
6. **First fall male (bright variant)**
7. **Adult female (red variant)**
8. **Typical adult female**
9. **Adult female (dull variant)**
10. **First fall female (yellow variant)**
11. **Juvenile with breast streaks.**

Many of these specimens were salvaged from road or window kills and brought in by concerned citizens, and some of them have proven to be very important. In March 2005, the museum obtained two particularly significant specimens from window kills in Texas: a crimson-collared grosbeak and an orange-billed nightingale-thrush. Both specimens represent the first such (i.e., first specimens, not first records or occurrences) from America north of Mexico.

The following month, another locally significant specimen was obtained when Mr. Karl Zimmermann picked up a dead crested caracara by the roadside in southwest Louisiana. The breeding population of caracaras in Louisiana has been estimated to be fewer than four pairs, far too scarce to justify the deliberate collection of a specimen. Consequently, this salvaged roadkill is the first specimen from Louisiana. (*Be aware that it is against the law to have in possession any non game-bird species without the necessary state or federal government permits. If a bird is found that may be of interest, check with the Louisiana Department of Wildlife and Fisheries by phone at 225/765-2800 or on the Web at www.wlf.louisiana.gov.*)

A Resource to the Scientific Community

Although the birds are owned by the museum, in a philosophical sense they belong to the world's scientific community. As custodian, the museum is responsible to ensure that the specimens receive the highest standards of curation and care to

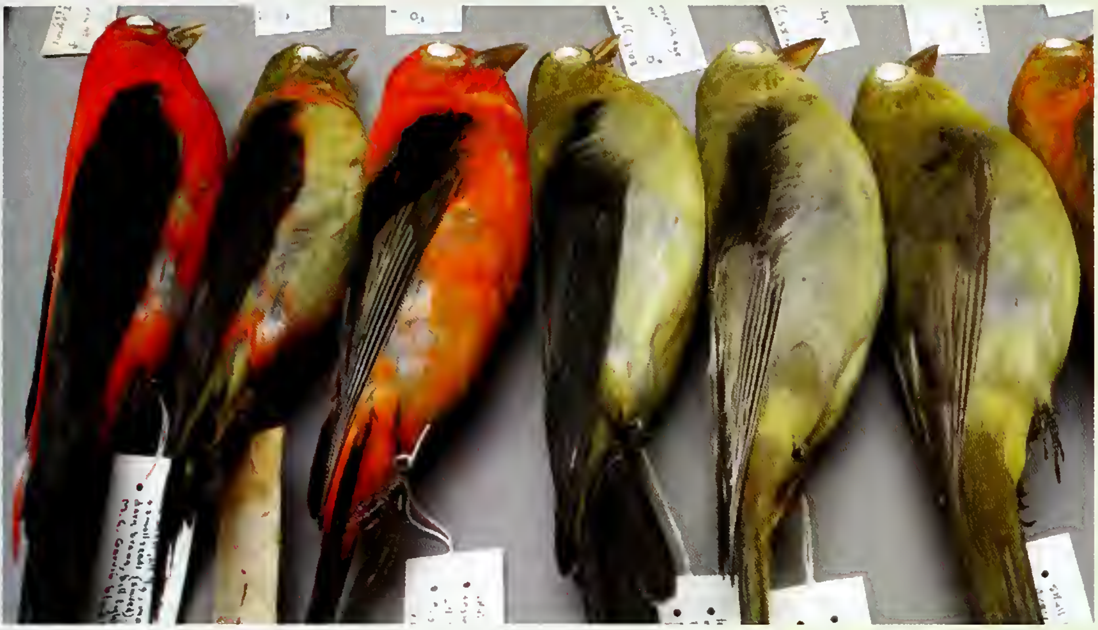


Photo by Joel Courtney

From left to right, this row of specimens displays some of the plumage variations among scarlet tanagers (*Piranga olivacea*):

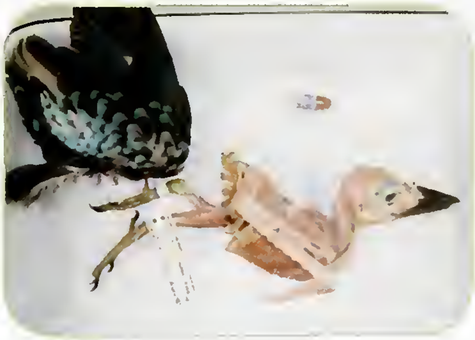
1. Adult male (typical breeding plumage)
2. Adult male (molting from breeding to winter plumage)
3. One-year-old male
4. Adult male (winter plumage)
5. First fall male
6. Typical adult female
7. Adult female (typical orange variant)

preserve them in perpetuity. This task requires cataloguing, storage in specialized cabinets in controlled atmospheric conditions and monitoring for (or removal of) insect pests. In this way, the specimens are available for any qualified individual who wishes to use them for research. An example would be for use in a restricted study of the bill length of a widely distributed species whose diet changes geographically. Changes in bill length might reflect changes in diet such as with the red crossbill, which dines primarily on conifer cones. This species complex exhibits nine distinct bill shapes varying in length and stoutness, each reflecting a diet of different size cones. Each "type" may represent a different species.

Another example could be differences in molting patterns among specimens of a species distributed over a wide range of latitudes or elevations. Studies using LSU's bird specimens have resulted in the publication of well over 300 scientific papers, with many more in preparation.

A far more obvious application for the birding public is the use of specimens for bird book illustrations, especially field guides. In spite of advances in photography, artists' illustrations of birds remain the best way to depict them because identifying features can be emphasized. Specimens from LSU's collection are frequently used by artists because of their extensive data, particularly colors of bare parts. In fact, the production of almost every recent book on birds of North, Central and South America, and to a lesser extent other regions of the world, has involved birds from LSU's collection. These books are both geographic in nature (focusing on birds of a particular country) and taxonomic (concerned with certain bird groups). Although the museum's focus is on North, Central and South America, the collection has good representation from Africa and a growing number of specimens from Southeast Asia. Zimmerman, Turner and Pearson's *Birds of Kenya and Northern Tanzania* (Princeton University Press, 1996) used many LSU specimens as guides when the illustrations were designed.

The nearly 45 years of exploration by John O'Neill and many LSU students who were awarded degrees using Peru as their study location will soon result in a major book on Peruvian birds. This will be a collaborative effort with John and other former students of Lowery's and Remsen's sharing the authorship. There has been a remarkable association between bird artists and the museum, no doubt due to John's own outstanding artistic accomplishments. He not only discovered birds new to science, but also often provided the first painting of the species for publication. Peruvian bird species number about 1,800 species, 20 percent of the world's total, so painting all the species requires the talents of more than one person. In addition to John, 13 other talented bird artists are working on the plates, including LSUMNS research associate Dan Lane. Naturally, specimens from LSU's collection are being used as subjects. One of the problems is



Bird preparations

Photos and text by Donna L. Dittmann, LSUMNS Museum Preparator

There are four basic types of museum specimens. The DISPLAY (OR TAXIDERMY) MOUNT is probably most familiar to most people. Depending on the preparator or taxidermist, there may or may not be any additional data archived with the finished mount. These preparations are intended for public display to illustrate a bird in a natural pose or habitat. A mount is fitted with glass eyes, the soft parts (like facial skin, legs and feet) are painted to retain life-like colors (because these fade shortly after death), and the bird's body is positioned by use of an internal form (plastic or fiber "body") and wires. To prepare a mount, the skin (with feathers attached) is carefully removed from the carcass. A few bones (skull, wing and leg bones) remain with the skin because they provide additional support. All tissue is cleaned off the bones, glass eyes are set in clay-lined eye sockets, a "body form" with wires is inserted and the wires are extended through the head, wings and legs. The skin is then sewn shut and the bird positioned. The exterior of the mount is then wrapped with cotton to ensure that the skin and feathers dry in the proper positions. A display mount may also be freeze-dried, in which case the entire carcass is pre-positioned (with wires, glass eyes), frozen, and then placed in a freeze-drying vacuum unit until completely dehydrated.

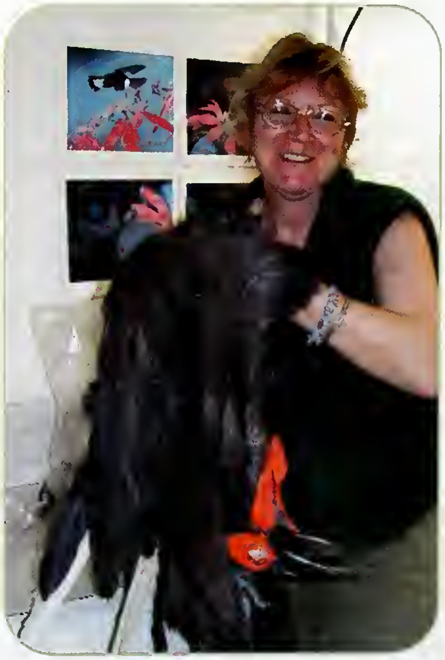
RESEARCH SPECIMENS, on the other hand, are always accompanied by additional data recorded at the time of collection and during autopsy. A label containing this information accompanies each specimen. There are three basic preparation types, with some overlap depending on slight differences in preparation style or anticipated specimen utility. Each type allows different aspects of a bird's morphology to be studied.

A FLUID-PRESERVED PREPARATION consists of an entire bird that has essentially been embalmed. The carcass is injected with formaldehyde to "fix" the tissues, then later flushed with water and transferred to alcohol for long-term storage. These "pickled" specimens can be dissected to study external or internal characters such as skin, feathers, muscles, nerves and organs.

A SKELETON PREPARATION consists entirely of a bird's bones. All other material is removed: skin, feathers, muscles and organs. Dermestid (or carrion) beetle larvae are typically used to strip any remaining dried tissue from the bones. When carefully monitored, a colony of these larvae can be used to clean specimens as small as a hummingbird or as large as an ostrich. Each partially disarticulated skeleton is stored in it's own box, but the museum catalog number is written on as many bones as possible in the event that bones from more than one specimen accidentally get mixed-up. During skeleton preparation, one feathered wing may be detached to accompany the skeleton as a "spread wing." A spread wing allows examination of a fully feathered open wing, including wing shape, surface area and color patterns.

The final preparation type is the STUDY SKIN. The study skin preparation process is generally similar to that of a display mount except that the specimen has cotton instead of glass eyes and the body is stuffed with soft cotton instead of a harder pre-shaped substance with wire supports through the extremities. To prepare a study skin, the bird's skin (with feathers attached) is carefully removed from the carcass. A portion of the skull (bill remains attached), and key wing bones ("hand" and ulna) and leg bones (tibiotarsus, tarsus, feet) are retained for support. A stick is placed inside the specimen (a "backbone replacement") to provide support between the skull and the body. Study skins are prepared in a standard pose so that they may be compared with each other. Once stuffed and sewn shut the specimen is positioned to lay on its back, wings neatly folded, tail feathers somewhat spread, legs crossed and toes straightened, and bill closed. Finally, the label is tied to the specimen's legs, and the specimen is wrapped with cotton and pinned to a board to hold feathers in place until the skin is dry. When completely dry, the skin is almost paper-like. Most study skins are "round skins," with cotton eyes and sewn shut cotton bodies. An alternative preparation is the "flat skin," in which the bird is not stuffed or sewn shut. This preparation style allows examination of the inside of the skin, which can be important for determining feather molt patterns.

Research skins are organized in drawers in large, dark, airtight cabinets that protect them from fading and from insect pests.



Top: A kookabura shucked out for a skeletal prep, which includes a tissue sample and a detached wing.
Bottom: Dittmann dries a hornbill after it was washed.

that new species continue to be discovered, new distributions determined, and many areas in Peru are still unexplored.

To continue the analogy with a library, access to the bird collection requires certain procedures, but if the birds are loaned out, the protocol is much more complicated than simply checking out a library book. First, the bird is removed from its storage tray, and a slip of paper is inserted in its place to document that the specimen has been removed. Then, the specimen's condition must be noted, and it must be quarantined in a pest-killing cabinet to guarantee that it does not contain feather-or-skin-destroying arthropods. Finally, the specimen must be carefully packed for shipping, insured, and then couriered to the requesting scientist. Some specimens may be too rare to risk sending out of the museum's care. In some situations, a digital photograph may be taken and sent out, or the researcher is invited to visit the museum. These visits encourage the exchange of ideas and sometimes result in collaborative projects that otherwise would never have evolved. When loaned specimens are returned to the museum, the process is reversed: they are unpacked, their condition is checked, and they are placed in quarantine. They are subsequently returned to their respective storage places among the species arranged phylogenetically in cabinets.

Careful statistics are maintained on the number of loans to researchers or artists and the number of publications that have used LSU's birds for research or illustration. This information is extremely important to justify funding support. In the past, the museum was able to operate on what could only be described as a shoestring budget. Dr. Lowery relied almost exclusively on private support for expeditions, but with so many different demands these days on philanthropic sources, the museum has had to increasingly support its work by competitive grants from U.S. government agencies. The museum's work is still funded to some extent by private sources, but the museum could always do more if funds were available.

Sometimes, during my occasional visits with Dr. George H. Lowery Jr. (who began the collection in 1936), he would pass on an anecdote, several of which are worth mentioning here. LSU hosted a national meeting of the American Ornithologists Union in 1952. As Dr. Lowery was showing some prominent ornithologists around the collection, he reached into one of the trays and pulled out a study skin of a rather large brown bird and asked the gentlemen if any of them could identify it. Silence. All were struck dumb, to the delight of Dr. Lowery, who was holding nothing more than a common barnyard chicken! They were probably expecting some unusual bird from an exotic location.

Photo by Donna L. Dittmann

After being cleaned and dried, the hornbill (previous page) is pinned. Museum staff typically prepare a study skin of zoo or aviary birds such as this one if they do not already have a corresponding skin in the collection.

Other conversations with Dr. Lowery weighed more heavily. Dr. Lowery had a talent for acquiring private financial support, and in 1959 he secured the support of Mr. Eugene C. du Pont III of Georgetown, S.C. Mr. du Pont agreed to fund expeditions to Africa, New Zealand, Mexico's Baja Peninsula, the Himalayas and possibly others. Material from these expeditions was to be used in constructing museum dioramas addressing certain zoological themes, and all was to be fully financed by Mr. du Pont. A "du Pont Hall of Mammals" had been planned, but little came to fruition. Unfortunately, the university could not afford the additional space in Foster Hall, and after two expeditions, Mr. du Pont severed ties with the museum simply because it was unable to accommodate the volume of specimens and to honor plans for expansion.

In the mid 1970s, Dr. Lowery expressed two wishes to me, which he hoped to realize before he died. First, he said that there would be a day of celebration when the museum catalogued its 100,000th bird specimen, and secondly, he looked forward to the day when the museum would acquire all of Foster Hall. Neither wish materialized prior to his death in 1978. But under Dr. Remsen's guidance, the bird collection has continued to make significant impacts on world of ornithology, and the collection catalogued its 100,000th bird specimen in the early 1980s (and should reach 200,000 within the next 10 years). Space demands by the university have prevented the museum from occupying all of Foster Hall, but should the space become available, the museum's current director, Dr. Fred Sheldon has guided the creation of formal plans for expansion.

Because Dr. Lowery was such a dominating force within the museum, when he died there was concern that the museum might fold. The LSU administration was not sufficiently aware of how important the institution had become in terms of conservation, research, education and international reputation. When John O'Neill assumed directorship of the museum, he successfully steered the museum through some difficult times. Dr. Lowery had filled the duel role of Curator of Birds and Curator of Mammals, but upon his death, two positions were necessary to fill the void. Dr. J. V. Remsen became Curator of Birds, and Dr. Mark S. Hafner served as Curator of Mammals. Dr. Hafner subsequently spearheaded the effort to create the world's first formal Collection of Genetic Resources for housing DNA samples and creation of the world's first Curator of Genetic Resources position in 1983.

A world-class collection is actually a reflection of the people that made it: the curators, collection managers and graduate students. When Dr. Remsen initially assumed the position of curator, he realized that in spite of the collection's outstanding holdings, there were numerous gaps in that a number of common species from Louisiana and adjacent states were not well represented. One of his initial tasks was filling in these gaps so that the collection would be more representative of Louisiana's avifauna. Subsequently, Steve Cardiff and Donna Dittmann have continued to narrow the gaps so that it is now one of the most comprehensive state collections in the United States.

A Resource to Students

Judging the museum's program in avian biology by its graduates, one comes to the inevitable conclusion that, like the bird collection, it too is world class. Recent graduates are employed by some of the most prestigious institutions, including tenure-track research positions at the U.S. National Museum of Natural History, Chicago's Field Museum of Natural History, the Cornell Laboratory of Ornithology, the University of Kansas Museum of Zoology, the Florida Museum of Natural History, the University of New Mexico's Museum of Southwestern

A wing spread from the prepared kookabura shown on page 18.

Photo by Donna L. Dittmann

Biology, the New York State Museum, Brazil's Museu Goeldi (one of the largest and most important museums in South America), Brazil's Instituto Nacional de Pesquisas da Amazonia and Bolivia's Colección Boliviana de Fauna to name a few.

The museum's graduate students receive training and experience situations available at few other institutions. Because of the museum's reputation, available positions are extremely competitive, and only the very best students are selected. Once enrolled, they are exposed to an outstanding research environment that encourages self-motivation. In addition to formal course work, they write grants for funding their own research, publish in refereed journals, employ cutting-edge techniques for DNA analysis and often participate in expeditions to some of the world's most remote locations. Thus, the pedagogical experience is a combination of 19th century exploration combined with 21st century science. In between times, they also do some local birding, honing their visual and auditory skills in field identification. To raise money for their research, the students organize an annual Bird-a-Thon, now in its 20th year, in which they solicit financial pledges for each bird they identify in a 24-hour period. The largest number of bird species identified in a single day was 211, a state record in 2003; however, identifications often exceed the benchmark of 200.

Another endeavor in which funds are solicited for research purposes is the Prep-a-Thon, now in its third year. Here, the emphasis is placed on specimen preparation, and points are awarded depending on the difficulty of preparation. Not only do the students improve their skinning skills and fund their research, but freezer space, always in short supply, is freed. In short, the museum takes in highly capable and motivated students, often inexperienced, and provides them with an environment and support such that by the time they graduate, they are well-seasoned researchers.

The museum's summer field program consists of regular expeditions to Middle and South America and southeast Asia, and occasional expeditions to Africa. Closer to home, museum personnel are involved in surveys of pelagic birds in the Gulf of Mexico, bird migration studies and biology of selected species. Perhaps ironic is that although the museum's activities result in the death of some individual birds, the results of its work helps to ensure the long-term survival of bird populations.

For example, the exploratory work of LSUMNS personnel has led to the formal designation of national parks and reserves in Bolivia and Peru that currently protect many millions of individual birds. Conservation of habitat is critical to species survival. Determining which areas are most important for umbrella species (those which serve as key for the survival of many others) and how the species are interact are important parts of the work of museum personnel. Taxonomic relationships among bird species are determined by the age-old criteria of morphology (similarities in shape and meristic quantities) and similarities of vocalizations, behavior and nest building. More recently, similarities and differences in DNA have been added to the arsenal of techniques used to determine taxonomic relationships. The museum's "library" of avian DNA is by far the world's largest and most important for birds (more than 50,000 specimens representing more than a third of the world's 10,000 bird species) and is heavily used by researchers from around the world. With Dr. Robb Brumfield as its current Curator, its growth continues to accelerate, but that is another story.

A number of people helped me get the facts straight and improve this manuscript. For comments and suggestions, I thank J.V. Remsen, D.L. Dittmann, J.P. O'Neill, J.J. Morony, Jr., S.M. Russell, and S.W. Cardiff. Manuel Plenge very generously provided a complete list of all bird species discovered in Peru. Dr. M. Ross Lein, Secretary of the American Ornithologists' Union sent an electronic copy of the AOU meeting proceedings hosted by LSU in 1952. Steve Cardiff, Donna Dittmann and John O'Neill took time from their very busy schedules to arrange for the photographs. Finally, the manuscript benefited from V.C. Bunker's editorial suggestions.

A native of Hammond, James M. Bishop received his Ph.D. in Marine Sciences from Louisiana State University. Based in Kuwait as a fisheries biologist since 1983, vacation trips to Asia, Africa and Europe are relatively convenient and allow him to maintain his casual interest in birding. He is a research associate of the LSUMNS.

Although visiting the bird collection requires special permission, the LSU Museum of Natural Science has several exhibit areas that are open to the public. For additional information about special programs and exhibits call 225/578-3080 or e-mail *mused@lsu.edu.*

Photo by David Moreland

Photo courtesy of George Wallace

WILDLIFE mentors

Story by
David MORELAND

One definition for a mentor is "a wise and trusted counselor or teacher." Mentors are those special individuals who come into our lives and inspire or encourage us to reach our life goals. They teach and share with us their wisdom, knowledge and life experiences. Mentors provide support, promote confidence and provide us with sound practical advice. They give us constructive suggestions without criticizing, exhorting us to keep trying.

At an early age I decided I wanted to pursue a career in wildlife and fisheries. Along the way, while pursuing this dream, many individuals served as mentors to me. They shared with me their wisdom and knowledge and enabled me to fulfill my dream. Here are a few of them, along with the impressions they have left with me.

JOE W. MORELAND, SR. (Above left) — No doubt my dad instilled within me at an early age the love for the outdoors, the woods and waters and the pursuit of the fish, birds and animals that live there. He gave me my foundation for hunting and fishing. I grew up fishing and hunting with him on Lake Bistineau. Fishing was pure enjoyment for him; he didn't have to catch fish to have had a good day. He would cast his tiny torpedo with the same energy and zeal from the first cast to the time he said, "We probably should head home." One virtue that I seized upon from him was *patience*. Indeed, patience has benefitted me in all areas of life, but it has also enabled me to be a successful deer hunter.

DR. HERBERT S. WALLACE (Above right) — Dr. Wallace taught undergraduate wildlife courses at Northeast Louisiana University (NLU) during my studies there, and he introduced me to the concepts and techniques of game management. I think of him as the Aldo Leopold of NLU (now ULM). He instilled in his students the need for *accurate field observations and documentation*. He also introduced me to the idea of incorporating *photography* into wildlife management. I remember sitting in his wildlife administration class in 1972 and talking about who the governor was appointing as Secretary of the Louisiana Department of Wildlife and Fisheries (LDWF). That individual was J. Burton Angelle, the first secretary that I would serve under at LDWF and another mentor of mine.

Photo by David Moreland

DR. R. DALE THOMAS (RDT) — RDT was my graduate professor at NLU and is responsible for giving me my *wildlife habitat* background. Upon graduation with my B.S., I realized that I needed to expand my knowledge concerning the plants that occupy the woods, fields, marshes and swamps of Louisiana. As author of the *Flora of Louisiana*, Dr. Thomas shared with me his insight and knowledge of the botanical world, equipping me to become a complete deer biologist. His expertise and support greatly aided me with development of the deer food checklist I published last year.

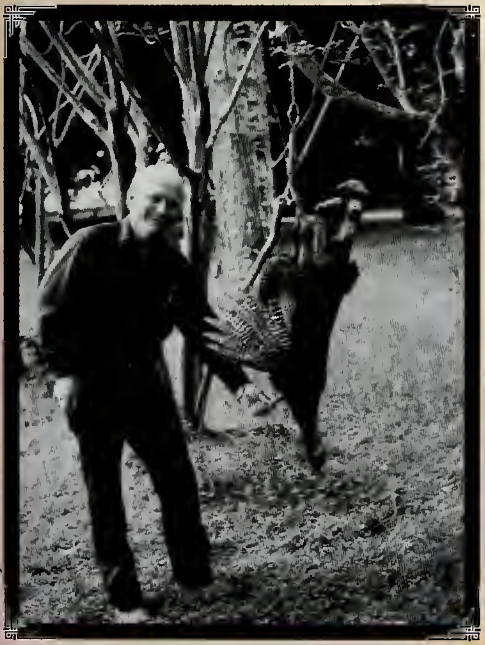


Photo by David Moreland

JOHN D. NEWSOM — Mr. Newsom had a career both with LDWF and Louisiana State University (LSU). He was one of the early biological leaders of the agency and later became leader of the LSU Cooperative Wildlife Unit. I greatly benefited firsthand from his wildlife knowledge and experience. As a young wildlife biologist, I was fortunate to work with him and to glean from his expertise of white-tailed deer and deer management. I recall sitting in his office at LSU one day and discussing the need for a more intense *deer management program* for landowners so they could better manage their deer herds. A year later an experimental program was initiated and later became an LDWF program (DMAP) that has proven to be most successful.

ALVIN FRIERSON — Alvin was the first area supervisor on Pearl River Wildlife Management Area. Pearl River was my first WMA, and Alvin introduced me to a whole new world, the swamp forest. We did not have turkeys in lower Webster Parish where I grew up and Alvin sparked my interest in *turkey hunting*. We never tired of hearing his turkey tales, even if it was the fourth or fifth time hearing it.

Photo by David Moreland

DEWEY WILLS — As Assistant Chief of the Game Division, Dewey took a fledgling biologist under his wing and helped to mold and shape me. He later supported me as I moved into the district supervisor position, along the way providing encouragement and building confidence. This veteran deer hunter also took a then novice deer hunter to *the next level of deer hunting*. He introduced me to duck hunting on Catahoula Lake (his old stomping grounds) and at the famous Marsh Hilton. For someone who had only hunted ducks on Lake Bistineau, I thought I had arrived in the big leagues.

Photo by David Moreland

Photo by David Moreland

LLOYD CUTRER (LC) — LC was a regional wildlife technician who could pretty much be called upon to do *anything* that was asked of him. He was the expert turkey trapper in the district, and he readily shared his expertise with a novice biological staff. Under his watchful eye, District 7 became a major player in the state *turkey restoration* program. Lloyd also introduced us to float fishing on the Tangipahoa River above Kentwood, teaching us how to catch two red-eye bass on the same lure.

JOE L. HERRING — Like Dewey Wills and John D. Newsom, Mr. Herring was one of the early leaders of LDWF. He began his career as a biologist and worked his way to become secretary of the department. Even though he is retired from the department, he continues to remain active in wildlife work. He is demonstrating to all of us the importance and need for *staying involved* and supporting wildlife, wildlife habitat and the pursuit of wild things.

Photo by David Moreland

MR. JOHN BARTON, SR. — As a landowner and hunter, Mr. Barton graciously opened up his land for research and management work. When I was a young biologist, he welcomed and encouraged me to conduct deer, turkey and rabbit research on his lands. DMAP was initiated on an experimental basis on lands that Mr. Barton owned and leased. He is a prime example of the *true stewardship landowner*, one that practices sound management and wise conservation of the wildlife resources.

Photo by David Moreland

Encounters we have with others as we "go about doing life together," no matter how brief, can have positive or negative impacts. Mentors always have positive impacts. As I close out my own wildlife career, I realize how significant and positive these individuals and their interaction in my life have been. For those I presently work with and to anyone I may encounter down the road, I hope that my impact has been and will be positive. We all have passion and knowledge to share. So I encourage you to consider becoming someone's mentor. When you do, that passion and knowledge live on.

David Moreland has been with the Louisiana Department of Wildlife and Fisheries (LDWF) since 1976. Formerly the state's Deer Study Leader, he now serves as the LDWF Wildlife Administrator. He is a frequent contributor to Louisiana Conservationist and the author of Checklist of Herbaceous and Woody Deer Food Plants of Louisiana.

LDWF File Photo

ready, steady, aim, *shoot!*

Life and Death in Outdoor Photography

Story by
Pete COOPER Jr.

Most folks who take pictures of outdoor activities are usually in a hurry, and therefore not very thoughtful about it. This predicament lends itself to creations that are not very imaginative. *"Hold it up and smile"* is most often the drill, especially when applied to a fishing setting. Then they take their shot. But instead of "seeing" through the view-finder, they only look. And they have no idea of the dangers that are always lurking outdoors near a camera and its film. Yet a picture is a visual reminder of a special event, something you can look at years later and relive the moment. *Shouldn't it then be as good as you can make it?*

Back when I decided to become a full-time outdoor writer, I thought I had all it took to be a success: lots of knowledge of hunting and fishing gained through 40-odd years of experience, a college degree in English and a fondness for putting ink on paper. But I learned very quickly that it took much more than wisdom and literary ability to sell magazine articles. It took pictures—really good pictures—and mine were usually bland at best: no excitement, boring, pat, dead. So I sought professional help.

These days I often get a dozen or so marketable pictures out of a roll of 36, and that's not bad. Over the past 17 years, I have continued to learn how to take better pictures, and in doing so I have also suffered through more photographic disasters than you could imagine. The purpose of these lines is to prevent you from experiencing those mishaps, at least those geared to fishing shots, and to increase the quality of your photographs, whether for publication or personal enjoyment—to give them the life that was there when they were taken.

Although they can sometimes lend an air of hilarity to a photo, genuine expressions are almost always preferable to phony, posed ones. Being ready for action and impromptu events is a surefire way to capture special moments—like the one above—in time.

Protect Your Equipment

Your camera should be protected any time it is not in use, and a shirt pocket is not a form of protection. Even the simplest "point-and-shoot" models will last longer and perform bet-

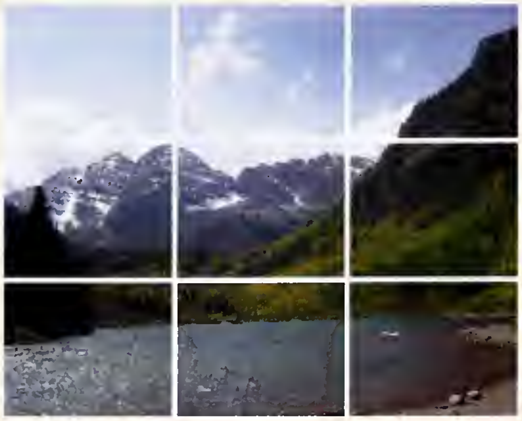


Photo by Marianne Burke

Be aware of composition.

•Divide a picture into thirds, horizontally and vertically. The center of interest should be at one of the points where the lines intersect. A photograph may have more than one.

•Avoid chopping the picture in half, either vertically or horizontally. Keep the horizon either above or below the photo's center and the major point of interest out of the static spot in the very center.

ter if they are kept in a padded case, better yet a waterproof, shock-resistant plastic case. Ironically, however, the better those are at serving their purposes, the more likely they are to create a problem: good camera cases of either type insulate very well. Now, let's create a setting.

It's a hot, humid August morning. Upon reaching the dock in your air-conditioned truck, you and your two buddies quickly load the boat, launch it and race away toward your latest hotspot. Within minutes after reaching it, one of your friends catches a great big something—a real trophy. You know enough to shoot (a.k.a. "take pictures") quickly if he chooses to release it, and to shoot now instead of back at the dock if he decides to keep it, and "now" is just right: the early-morning light is soft, the back-drop is scenic, and the fish is indeed big—all the ingredients for a great picture. So you quickly take the camera from its case, remove the lens cover, take aim... *And the lens abruptly fogs up!*

Because of the insulating ability of good camera cases, you should acclimate your camera to the ambient temperature as soon as possible by opening the case and putting it—with the camera still in it, of course—in a safe place. On many popular types of craft there isn't much which fits that description, especially while you are running, except for your lap or a "dry-storage" compartment. Be aware, though. I once drowned a perfectly good Nikon in one that wasn't. Yeah, it was partially my fault; I didn't think about what I was doing at the time, and that's all I intend to say on the matter. The point is, hopefully my relating the incident will cause you to make certain the compartment in which you intend to put your camera is absolutely dry and not sort of dry!

Great Shots Don't Just Happen

Okay, let's say the camera is safe and properly acclimated at the time your friend lands his trophy. He then grips it by the jaw—or whatever "handle" the creature is equipped with, holds it out in front of him, looks right into the camera's lens, and grins. Haven't you seen enough pictures like that to make you want to throw up? In

Photo by Marianne Burke

Fill the frame.

•Consider whether a vertical, horizontal, or skewed orientation would best suit the subject.

•Decide what you like best about a scene you are photographing and then try getting closer, filling the frame with that which most interests you.

the industry they are known as "grip-and-grin" pictures, and they are deader than last season's ducks!

Enlivening them is very simple if you think about it at the time. Of course, action is aways preferable to posed, "trophy" shots, but if you must pose, try poses that depict action—life! For starters, make sure that the subject is not directly facing the lens. You can experiment for better and better results, but consider this: have your subject kneel on the deck facing slightly away from the camera; then turn his face and shoulders toward the lens but not squarely to it. Have him look at the top of your hat or at one of your shoulders, not into the lens. A joyful appraisal of the fish is also a departure from the boring norm. And remember that a natural face is always livelier than a forced one. You can get some great expressions by making certain, uh, "off-the-cuff" comments about the subject's looks. And above all, tell him to relax; tension depicts a corpse!

Photo courtesy of Marianne Burke

Go for the action.

•Be prepared and time your shots, especially with wildlife.

•Watch for clues that your subject is about to move. Animals often repeat patterns.

•Be familiar with your equipment and set up ahead of time, as much as you can. A split second can mean the difference between a boring shot and an award-winning photograph.

Props are a real help in livening up a picture. If need be, re-position the lure in the fish's mouth so it can be seen. Have the subject hold his rod as naturally as he can. Try not to bisect either his face or the fish. Lay a landing net on the deck and have him hold the fish in such a manner as he would after just removing it from the net. Best of all, add a friend.

Interaction between two anglers always makes a better picture, even if they are both "gripping and grinning." But life can easily be added by having the friend hold the fish or the net while the proud angler holds his rod. Both of them should be looking at either the fish or each other and appearing to be quite happy about the affair, a state of mind you can establish by shouting "Smile!" just before you take the shot. There's something mystical about that phrase when two guys hear it uttered emphatically when they are together with a big fish in front of a camera.

One last thing about the subject. Clothing, especially in saltwater settings, often consists in part of a white tee-shirt. Add to that the normally white decks of many boats, and a picture can turn out awfully harsh, or "hot." Shirts with bright colors will create a lot of life in pictures taken from within a white boat. Sure, they will be a little warmer than a white tee-shirt, but you'll get over that; you may never get another chance for a particular picture, and color will enhance it greatly.

The background check should be made before the fish is landed, but this quick task is often ignored until the last minute. Therefore, for the fish's sake if it is to be released, the rush to shoot precludes the practice. Life in the background is gained by simply putting something there: a big, moss-draped cypress tree, another boat, or a distant thunderhead, for instance. Of course, they must be away from the sun. If at all possible, position the boat accordingly before the fish is landed.

Now everything is ready for the shot. But if you only look through the lens, then you might not see that beer can, or the sack of trash left over from breakfast on the boat, or that big gob of mud from the

Digital Photography Basics

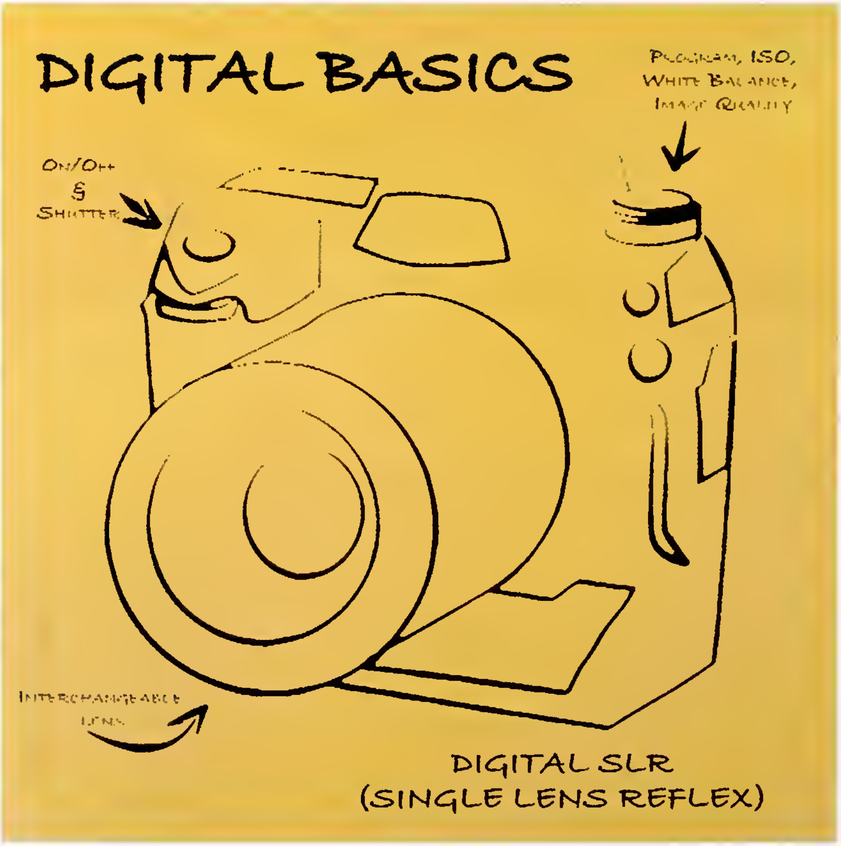
For those of you interested in digital photography, the following guide will help you get started. The favored digital camera among serious hobbyists and professionals is the DSLR or digital single-lens reflex. Anyone familiar with a good quality 35mm camera can pick one up and use it almost immediately.

The common features are still there. The photographer can choose "film speed," aperture and shutter speed just like a 35mm. The main difference is that the image is captured by a light-sensitive chip instead of film and stored as code on a disk. Your medium will depend on the brand and model of your camera. Additional features include a white balance setting that adjusts for the type of light (fluorescent, incandescent, sunlight, etc.) and instant feedback via a small liquid crystal display, or LCD, screen.

Another important feature is the image quality setting. At the highest setting, a camera with a 7-megapixel chip will provide a nice 8-inch by 10-inch image at 300 pixels per inch, the preferred resolution of glossy magazines.

It is important to know how the image will finally be displayed, whether on the Web or in print, to determine how many pixels the image should have. For example, the Internet standard resolution is 72 pixels per inch. That means each inch of the computer screen displays 72 red, green or blue squares that make up the picture you see. If the image will be displayed on a Web page at, say, 6 inches by 4 inches, it should be 432 by 288 pixels. With a print-standard density of 300 pixels per inch, that same 6-inch by 4-inch image would need to be 1800 pixels by 1200 pixels (about 2 megapixels) to show all of its detail in a magazine. If a magazine tried to print an image without the proper resolution, it would appear distorted.

- "Pixel" is a contraction of the words "picture" and " element."
- A megapixel equals about one million pixels.
- SLR cameras allow photographers to select lenses with the correct fields of view and magnification to best capture their subjects.


DIGITAL BASICS
PROGRAM, ISO, WHITE BALANCE, IMAGE QUALITY
ON/OFF & SHUTTER
INTERCHANGEABLE LENS
DIGITAL SLR (SINGLE LENS REFLEX)

Text and illustration by Thomas Gresham

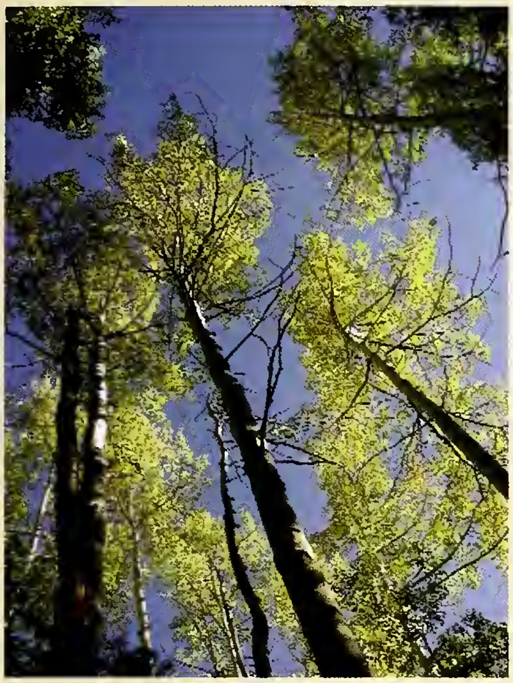


Photo by Marianne Burke

Try a fresh perspective.

- You may have to try different angles to get the perfect shot. The same subject will look very different from above, below and at eye level. Experiment!
- Particularly with children and small animals, it is important to get down on their level...literally.
- Get as close as you can to your subject. If you can't get close physically, be sure you have the proper lens.
- Remember that straight or head-on shots are less active than shots made at an angle, so try putting your subject at one side.

anchor lying on the deck behind the subject—all real killers. "See" how the fish looks; is its side glaring from the sunlight? Then have the subject tilt its back toward the lens.

Okay, everything looks just right. You take a quick breath, hold it, shout "Smile, darn it!" and...*CLICK*. "All right, guys," you then declare, "Great job—that will make a fine picture."

Are you sure about that? Are you sure you didn't flinch? Are you sure one of the subjects didn't flinch? Or blink? Are you sure the fish didn't move? Come on, folks, this is an occasion that you want to remember as clearly as possible for a lifetime. But I see it done regularly. Compared to the value of a special event like a first-time or trophy catch —or any event worth remembering—film and processing is dirt cheap! The more shots you take, the better chance you have of getting a great one.

Okay, so you popped a half-dozen or so, which should be enough if you're using film, and then you ran out of bullets; time to reload. In a boat, that act—like putting your camera in a dry-storage compartment that isn't—can lead to disaster, even if you use extreme care while performing it.

The culprit is not spray as one might imagine but a piece of grit which finds its way into the inner workings of the camera and lodges there. That happened to me with two different cameras a few years back, and the grit made a small, longitudinal cut across every frame in three rolls of film, rendering them worthless! Of course, they happened to include pictures of the largest member of two—TWO!—species I had ever caught. Good timing, huh? When you open the camera, shield it from the wind with your body and change rolls as quickly as you can. (And a little prayer won't hurt!)

In truth, as with mortal life and fly rods, death will eventually come to outdoor photography equipment, no matter how much effort you put out to prevent it. But you can keep life in your pictures forever if you just think about it.

Louisiana's outdoors are full of beauty, surprises and memorable moments. But all the knowledge and equipment in the world can't help you take a good photo if you're not out there to see it. So I've saved my best advice for last—*GET OUT THERE AND ENJOY!*

Recognized as a pioneer of saltwater fly-fishing in Louisiana, Pete Cooper Jr. is the author of Fly Fishing the Louisiana Coast. He is a member of the Louisiana Sportsman's Hall of Fame and is a regular contributor to Louisiana Conservationist.

B.P. AMERICA DONATES $250,000 FOR WHITE LAKE WETLANDS AREA

IN JANUARY, THE LOUISIANA Department of Wildlife and Fisheries (LDWF) received a $250,000 donation from BP America Production (BP) to be used to offset operational costs of the White Lake Wetlands Conservation Area.

"We commend BP in their efforts to assist the department with the management and development of this valuable wildlife habitat," said LDWF Secretary Bryant Hammett.

In 2002, BP donated the 71,000 acres of wetlands and marsh land near Gueydan to the state. LDWF assumed management control in July 2005. A 14-member board, appointed by the Governor, works with LDWF in an advisory capacity on site management issues. This donation is the fifth annual payment of this size committed to by BP in connection with its donation agreement of July 2002.

Representing BP at the check presentation ceremony were Marti Gazzier, general manager, Government and Public Affairs Gulf Coast and Mid Continent, and Karl Connor, director, Government Affairs Louisiana and Mississippi.

For more information, contact LDWF Press Secretary Bo Boehringer at 225/765-5115 or Nicola Montorsi with BP America at 281/366-0847.

LDWF File Photo

From left to right: Marti Gazzier, Bryant Hammett, Dr. Steve Linscombe and Karl Connor.

FOR MORE INFORMATION ON LDWF PROGRAMS AND EVENTS, VISIT US AT *www.wlf.louisiana.gov.*

LAKE RAMSEY WMA REFORESTATION

FOR SEVERAL YEARS THE Louisiana Department of Wildlife and Fisheries (LDWF) has contracted with The Nature Conservancy (TNC) for prescribed burning on Lake Ramsey WMA.

They recently completed the second phase of restoring longleaf pine to the northern portion of the area when LDWF personnel from both Wildlife and Fur & Refuge divisions planted 4,500 longleaf seedlings and accomplished additional direct seeding of longleaf pine seed.

"TNC has done an excellent job with the burning program, enabling us to move forward and restore the native longleaf pine," stated Kenny Ribbeck, biologist program manager of the LDWF Forestry Section.

A final harvest will occur within five years, and LDWF will conduct woody invasive control this summer, focusing on controlling the Chinese tallow tree. For more information, contact Kenny Ribbeck at 225/765-2942 or *kribbeck@wlf.louisiana.gov.*

LDWF AGENTS RESCUE INJURED BALD EAGLE

ON JAN. 21, LOUISIANA Department of Wildlife and Fisheries Enforcement Division agents rescued an injured bald eagle off Highway 112 in Beauregard Parish.

When agents received a call from an Oakdale resident reporting a large injured bird, Lt. Jesse Savoie and Sgt. David Liles responded to the location and identified the bird as a juvenile bald eagle. The eagle had been struck by a vehicle and suffered a broken wing. The eagle was alive, and agents placed it in a pet carrier and transported the eagle to a rehabilitation facility in Lake Charles. The eagle made the trip in fine shape and was released to Suzie Heck, owner of a federally licensed animal rehabilitation clinic.

Heck informed the agents that the bald eagle was approximately three years old and that the eagle would be brought to a veterinarian to assess the damage to the broken wing. Heck also explained that the eagle was in good health and there was a good possibility the eagle could fly again after the treatment.

For more information, contact Lt. Col. Keith LaCaze at 225/765-2469 or at *aze@wlf.louisiana.gov.*

LOUISIANA QDMA CHAPTER DONATES TO DEER TELEMETRY STUDY

The Louisiana Department of Wildlife and Fisheries (LDWF) and Louisiana State University (LSU) recently received a $6,670 donation from the Louisiana Quality Deer Management Association (QDMA) State Chapter to help purchase equipment and supplies for a new deer telemetry project that started this fall. The project is titled "Population Characteristics of a White-tailed Deer Herd in a Bottomland Hardwood Forest of South-central Louisiana."

"This generous donation will greatly improve the success of this research project," said LDWF Deer Program Manager Scott Durham.

However, donations for research supplies are still needed. Any person or organization interested in contributing financially to the project should contact Scott Durham, LDWF Deer Program Manager, at 2000 Quail Drive, Baton Rouge, LA 70898 or by phone at 225/765-2351.

QDMA was founded in 1988 and is a non-profit wildlife conservation organization dedicated to ensuring a high quality and sustainable future for white-tailed deer and white-tailed deer hunting. QDMA currently has over 40,000 members in all 50 states and has four QDMA branches in Louisiana. For information about joining your local branch or chapter, please contact Bob Stevens at 318/445-9224 or visit their Web site at *www.qdma.com*.

A. Wilbert's Sons L.L.C. is the primary landowner and cooperator and is also providing technical, logistical and housing support for the researchers. Michael J. Chamberlain, Ph.D., representing the LSU School of Renewable Natural Resources, is directing the research.

The primary objectives of the study are to assess range and movements of male and female white-tailed deer, evaluate age and sex-specific harvest rates of white-tailed deer, and evaluate survival and causes of death among male and female white-tailed deer.

Researchers are conducting the study on approximately 40,000 acres of bottomland hardwood forest located west of Baton Rouge and east of the Atchafalaya Basin. The study area is currently leased to more than 30 private hunting clubs, and each club belongs to a cooperative that promotes quality deer management on the property.

For additional information on this project, contact Scott Durham at 225/765-2351 or *sdurham@wlf.louisiana.gov*.

SISTER LAKE CAMP DESTROYED BY FIRE

The Sister Lake camp, which served as a research station and enforcement outpost for the Louisiana Department of Wildlife and Fisheries (LDWF) for nearly 60 years, was destroyed by fire on March 4, 2007.

The camp sat on a small island leased from ConocoPhillips and was surrounded by Caillou Lake (commonly referred to as Sister Lake) in Terrebonne Parish. It was only accessible by a 25-minute boat ride from Bayou Dularge.

The camp was built in 1947. It was used primarily to monitor the state's premier Public Oyster Seed Reservation in Sister Lake. The camp was also used by LDWF Marine Fisheries staff as a shrimp tagging station, for finfish research and as a crew-staging site for oyster lease surveys among other projects. Additionally, the camp served as a refuge for LDWF personnel working in the area.

Though it had not been staffed full-time since the 1980s, the facility was used for project work by biologists, survey teams and enforcement agents in the area. The camp had survived some of the strongest hurricanes in U.S. history and received only minor damage from Hurricanes Rita and Katrina from 2005.

The cause of the fire is still under investigation.

LOUISIANA FISHERMEN BEGIN RECEIVING FUNDS FOR RECOVERY

In February, 45 fishermen from coastal parishes gathered in Baton Rouge to collect the first grants available to them since Hurricanes Katrina and Rita wiped out over $400 million in fishing infrastructure over 18 months ago.

The Louisiana Fishing Community Recovery Coalition (LFCRC) has worked tirelessly to ignite recovery through its Back to the Dock program, and through the collaboration with Shell and the planning districts will provide some fishermen the ability to get back to the dock quickly.

LFCRC also secured a commitment of $20 million from the Louisiana Recovery Authority for recovery of the fisheries.

For more information, contact Kevin Belanger or Jo-Anna Jones with the South Central Planning and Development Commission at 985/851-2900.

LOUISIANA Conservationist

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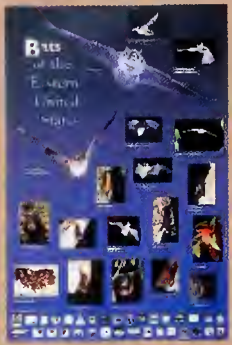

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Sponsored by the Louisiana Wildlife and Fisheries Foundation (LWFF), the calendar showcases some of the many conservation projects that the LWFF helps fund each year. Also provides many important dates for outdoor enthusiasts.

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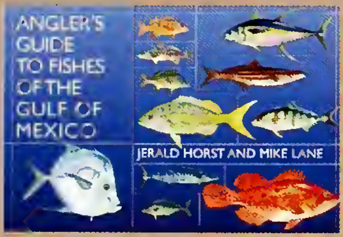
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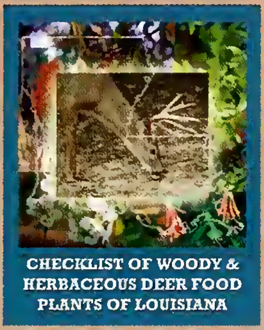
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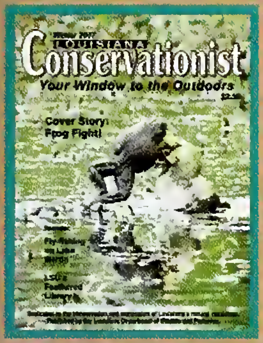

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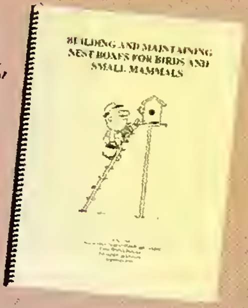
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AGENTS OF *Change*

the evolving role of wildlife and fisheries enforcement agents

LOUISIANA'S BOATERS: SAFER, MORE RESPONSIBLE AND MORE KNOWLEDGEABLE

By Sgt. Rachel A. Zechenelly

Boating is a Louisiana tradition. Every year people from across the state jump into their boats and head out into some of the four million acres of Louisiana waterways to enjoy numerous recreational boating activities from hunting and fishing to waterskiing and pleasure cruises. In most cases boating is safe, enjoyable and relaxing to all who participate.

It also can be a dangerous activity with deadly consequences. In 2006 there were more than 110 boating incidents and 24 boating fatalities. The Louisiana Department of Wildlife and Fisheries Law Enforcement Division (LDWF/LED) has been active in making boaters in Louisiana safer, more responsible and more knowledgeable. One of the keys to accomplishing that task is *BOATING EDUCATION*.

In July of 2003, mandatory boating education came into effect for those born after January 1, 1988 , who operate a motorboat powered by a motor over 10 horsepower. This law requires those people to successfully complete a National Association of Boating Law Administrators (NASBLA) approved boating education course to operate such vessels.

In 2004, Louisiana also raised the minimum age a person can operate a personal watercraft from 13 to 16, grandfathering in operators who were 13 on January 1, 2005, as long as they completed a NASBLA approved boating education course. These laws were enacted to produce an educated boating population in Louisiana, with the ultimate goal of reducing the number of fatal boating incidents. Since the inception of mandatory boating education, Louisiana has seen the realization of this goal with the number of fatal incidents falling from 40 in 2003 to 24 in 2006.

The LDWF/LED oversees the "Boat Louisiana" boating education program. Free classes are offered year-round across the state. The course lasts six to eight hours and is usually completed in one day or in some cases over two evening classes. The course includes information on choosing a boat, classification, hulls, motors, legal requirements and equipment requirements, many navigation rules, navigation charts, trailering, sailboats and related subjects that include canoeing, personal watercraft and more. Upon completion of the course, the student is issued a vessel operator certification card. An online course is also available for a small fee charged by the online course provider.

Photo by Keith Brunson

Five-year-old Connor Brunson practices safe boating at Cotile Lake. Remember: PFDs save lives!

Most courses are taught by LDWF/LED enforcement agents, volunteers and teachers from schools across the state. In an effort to have an adequate number of qualified volunteer instructors, the LDWF/LED has implemented a boater education instructor certification course. The one-day certification course includes such topics as policy and procedure, NASBLA standards, teaching methods and organization and presentation. Once a volunteer successfully completes the course, he or she can then schedule and teach the "Boat Louisiana" course. Interested volunteers can contact our department to receive an application form. All applicants are considered volunteers and a background check may be conducted.

Louisiana has more than 320,000 registered boats and nearly double that amount of people who participate in recreational water activities. As the demand for the recreational use of Louisiana's waterways increases, it becomes more and more important for boaters to be *SAFE, RESPONSIBLE AND KNOWLEDGEABLE*. All boaters must commit themselves to learning and practicing the fine points of safe watercraft operation. To find a free boating education course near you, visit our Web site at *wlf.louisiana.gov/boating/courses/*.

For more information about boating education or becoming a volunteer instructor, contact Sgt. Rachel M. Zechenelly at *rzechenelly@wlf.louisiana.gov*.

LA Cuisine
THE LOUISIANA KITCHEN

Shrimp Norman
(Serves 6-8)

1 lb.	**Fresh 16-20 count Louisiana shrimp, peeled and butterflied**
	Self-rising flour
	Cottonseed oil
	Norman sauce
	Parsley flakes

Dip each shrimp in water then flour. Repeat this step. Heat cottonseed oil to 350°. Using your hand, flatten butterflied shrimp. Fan layers at tip of tail. Drop flat into hot grease, causing shrimp to curl. Fry shrimp 4 to 6 minutes. Drain. Arrange shrimp pointing tails outward on a serving dish. Top with Norman sauce and sprinkle with parsley.

Norman Sauce

6 c.	**Yellow onions, chopped**
3/4 c.	**Green bell peppers, chopped**
1/2 c.	**Celery, chopped**
2 1/2 tsp.	**Fresh garlic, minced**
4 Tbsp.	**Butter**
4 Tbsp.	**Margarine**
2 1/2 tsp.	**Salt**
1/2 tsp.	**Cayenne pepper**
1 3/4 c.	**Light roux**
4 c.	**Water, divided**
1 1/2 lbs.	**White crabmeat (lump or backfin), divided**

In a medium pot, saute onions, bell peppers, celery and garlic in butter and margarine. Cover and simmer 30 minutes over low heat, stirring frequently. Add salt, cayenne pepper and light roux and stir. Simmer 5 to 7 minutes over medium heat. Add 1/2 cup water and bring to a boil. Add remaining 3 1/2 cups water and 1 pound of crabmeat. Stir and bring to a boil. Add remaining crabmeat and simmer over low heat until ready to serve.

Stuffed Potatoes

3	**Large potatoes, baked**
1/2 lb.	**Bacon, cooked crisp and crumbled**
3/4 c.	**Cheddar cheese, shredded**
1 tsp.	**Salt**
1 1/4 tsp.	**Black pepper**
1 Tbsp.	**Butter or margarine, melted**
1/3 c.	**Sour cream**
1 c.	**Low-fat milk**
1/4 c.	**Green onions, chopped**

Cut each potato in half lengthwise. Carefully scoop inside of potatoes into a large bowl, setting aside potato skins. Add remaining ingredients to bowl and mix until creamy. Spoon mixture into reserved potato skins and bake 20 to 30 minutes at 450°.

Recipes provided by Mike Anderson's Seafood in Baton Rouge.

Photo by David Humphreys

"No License Required" Fishing Weekend is June 9-10. Visit our Web site at *www. wlf.louisiana.go* for official rules and regulations.

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